

(iii) Should be provided, upon request, in alternate formats (*e.g.*, Braille, ASCII text, large print, audio recording, etc.) or alternate modes (*e.g.*, voice, facsimile, relay service, teletype ("TTY"), Internet posting, captioning, etc.), and;

(iv) May be packaged with the product or may be provided separately upon request, if the manufacturer has included in the product package the address of its point of contact for accessibility or compatibility information.

#### **4. Complaints.**

(a) *Informal resolution of inquiries or complaints.*

(1) Individuals with disabilities and manufacturers of telecommunications equipment and CPE are encouraged to resolve informally complaints about the accessibility or compatibility of telecommunications equipment or CPE using the following procedures.

(2) Each manufacturer of telecommunications equipment and CPE shall establish one or more points of contact for inquiries or complaints about the accessibility, usability, or compatibility of its telecommunications equipment or CPE. Within 90 days of the effective date of the Guidelines and thereafter within 10 days of a change thereof, each manufacturer of telecommunications equipment and CPE shall file with the Commission the following information regarding each point of contact:

- (i) Name or department designation;
- (ii) Address;
- (iii) Phone number;
- (iv) TTY number;
- (v) Fax number;
- (vi) Internet address; and
- (vii) Product(s) or product lines.

The Commission shall make this information available to any party upon request.

(3) Complaints about the accessibility, usability, or compatibility of telecommunications equipment or CPE must be submitted in writing (which shall include electronic communications such as electronic mail, facsimile transmission, or audio cassette) to the manufacturer's point of contact prior to the filing of a formal complaint with the Commission.

(4) A manufacturer shall respond to informal complaints submitted pursuant to Paragraph 4. (a) (3) or Paragraph 4. (b) within 60 days of receipt thereof or such later date as may be mutually agreed to by the informal complainant ("complainant") and the manufacturer.

(b) *Commission response to premature complaints.* The Commission will only resolve complaints that could not be resolved informally between the informal complainant and the manufacturer against whom the informal complaint is lodged. In the event that the informal complainant submits a complaint to the Commission alleging that the telecommunications equipment or CPE is not accessible or compatible without having first afforded the manufacturer an opportunity to resolve the complaint informally, the Commission shall either advise the complainant to contact the manufacturer to resolve the complaint informally and provide the complainant with the appropriate method of contacting the manufacturer's point of contact or forward the complaint to the manufacturer's point of contact for informal resolution.

(c) *Formal Commission resolution of complaints.* Only complaints which could not be resolved informally between the complainant and the manufacturer following procedures described in Paragraph 4. (a) (3) and 4. (b) will be eligible for formal Commission resolution.

(1) Complaints submitted to the Commission for formal resolution must:

(i) Include copies of the informal complaint or inquiry submitted by the complainant to the manufacturer and any written response(s) from the manufacturer to the complainant; or

(ii) Demonstrate that the manufacturer did not respond to the informal complaint within 60 days or such other time period as mutually agreed to by the parties or has failed to provide a reasonable resolution of the complaint;

(iii) State with particularity the specific equipment features that present a barrier to accessibility, and

(iv) If known, describe a specific and applied solution to that barrier.

(2) Upon receipt of a complaint that meets the criteria of Paragraph 4. (c) (1) above, the Commission shall provide notice to the manufacturer against whom the complaint was filed and the complainant by forwarding a copy of the formal complaint to the manufacturer's point of contact and the complainant.

## **5. Complaint answers.**

(a) *Manufacturer's answer.* A manufacturer shall have 60 days from the date it receives notice from the Commission that a formal complaint has been filed against it, to submit its answer to a complaint. The manufacturer shall file a copy of its answer with the Commission and serve a copy of its answer on the complainant. A manufacturer's potential answers to a complaint include:

(1) The complainant failed to exhaust the informal complaint resolution process.

(i) The complainant has not made the prerequisite attempt to resolve the complaint informally; or

(ii) The manufacturer has not been afforded 60 days from receipt of the informal complaint to respond thereto.

(iii) Where the complainant has failed to exhaust the informal complaint resolution process, the complaint shall be handled in accordance with Paragraph 4. (b).

(2) The complaint fails to state a claim that Section 255 has been violated because:

(i) The product against which the complaint was filed does provide the accessibility or compatibility as defined in these Guidelines;

(ii) One or more of the manufacturer's existing products, or products in the design or development stage, with reasonably comparable features and manufacturer's price ranges provides, or will provide, the accessibility or compatibility as defined in these Guidelines; or

(iii) The accessibility or compatibility that is the subject of the complaint is not readily achievable.

(3) The Commission and the manufacturer against whom the complaint was filed have entered into a consent order, as described in Paragraph 7. (a), which:

(i) Concerns the same or substantially similar area of noncompliance alleged in the complaint; and

(ii) For which the final deadline for achieving compliance under the consent order has not yet expired.

(b) *Effect of consent order.* Where such a consent order exists, the complaint shall be dismissed with prejudice. In dismissing the complaint, the Commission shall notify the complainant of the following:

(1) The subject matter and the final deadline for compliance under the consent decree; and

(2) That further complaints (except for complaints alleging non-compliance with such consent decree) against the manufacturer concerning the same or substantially similar areas of non-compliance are precluded.

(c) *Rebuttable presumption of compliance.* A manufacturer is entitled to a rebuttable presumption of compliance (*i.e.*, that it is not readily achievable to make the particular telecommunications equipment or CPE accessible) if the manufacturer satisfactorily demonstrates to the Commission that, with respect to the equipment which is the subject of the complaint, it has:

(1) Adopted a disciplined process for evaluating accessibility and compatibility as prescribed in Paragraph 3. (a);

(2) Described its process to the Commission and the complainant, either in response to the complaint or in another prior communication; and

(3) Utilized that process consistently.

## **6. Replies to complaint answers.**

(a) *Complainant's reply.* A complainant shall have 60 days from the date of receipt of the manufacturer's answer to submit a reply to the manufacturer's answer. The complainant shall file a copy of its reply with the Commission and serve a copy on the manufacturer's point of contact. A reply must include specific evidence that the manufacturer's contention that the complaint does not state a claim that Section 255 has been violated is without merit because:

- (1) A substitute product identified by the manufacturer does not possess reasonably comparable features and a reasonably comparable range of prices as the product complained of, or does not provide the accessibility or compatibility defined in these Guidelines; or
- (2) The accessibility or compatibility that is the subject of the complaint was readily achievable at the outset of the design and development activities related to the equipment that is the subject of the complaint; or
- (3) The manufacturer is not entitled to a presumption of compliance because it did not make the demonstration required by Paragraph 5. (c).

## **7. Remedies**

- (a) Where the parties voluntarily agree to settle a complaint or the Commission determines that a violation of the Commission's Guidelines has occurred, the Commission shall negotiate an agreement with the manufacturer that imposes obligations on the manufacturer to undertake specific measures to remedy the alleged or identified area of non-compliance within a specified time period. The outcome of this process shall be a consent order.
- (b) Violation of a consent order, whether entered into after a determination by the Commission that a violation of these Guidelines has occurred, or in the absence of such a finding, shall subject the consenting party to any and all sanctions which could have been imposed in the proceeding resulting in the consent order if all of the issues in that proceeding had been decided against the consenting party and to any other sanctions agreed upon in the consent order. The Commission shall have the burden of establishing that the consent order has been violated in some material, but not every, respect. Violation of the consent order shall be the only issue in a proceeding concerning such an alleged violation.

## **8. Standards**

- (a) *Interface Standards.* Telecommunications equipment and CPE shall be deemed to be compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access if it conforms with an applicable compatibility interface standard developed by an accredited consensus-based standards development process.

(b) Consistent with the National Technology Transfer and Advancement Act of 1995, 15 U.S.C. 3701, any such compatibility interface standards shall be developed by voluntary consensus standards bodies. To ensure that such standards are established using a consensus-based process open to participation by all affected parties, accreditation by the American National Standards Institute ("ANSI"), or other similar accrediting organization with comparable accrediting criteria, shall be required of all organizations developing compatibility interface standards.

## **9. Appendix --Accessibility Guidelines.<sup>#</sup>**

(a) Telecommunications equipment and CPE shall be accessible to and usable by individuals with disabilities, as described in these Guidelines, if readily achievable.

(b) *Redundancy and selectability.* Telecommunications equipment and CPE shall provide redundancy such that input and output functions are available in more than one mode. Alternate input and output modes shall be selectable by the user.

(c) *Input, controls, and mechanical functions.* Input, controls, and mechanical functions shall be locatable, identifiable, and operable through at least one mode that complies with the following:

(1) Operable without vision. Functions shall not require user vision.

(2) Operable with low vision. Functions shall not require user visual acuity better than 20/70, and shall not rely on audio output.

(3) Operable with little or no color perception. Functions shall not require user color perception.

(4) Operable without hearing. Functions shall not require user auditory perception.

(5) Operable with limited manual dexterity. Functions shall not require fine motor control or simultaneous actions.

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<sup>#</sup> Paragraphs 9 and 10 comprise appendices which contain the substantive provisions of Subparts C and D of the Architectural and Transportation Barriers Compliance Board's proposed Telecommunications Act Accessibility Guidelines. 62 Fed. Reg. 19178 (April 18, 1997). These paragraphs are included in this Proposal for the purposes described in Paragraph 3. (a) (1).

(6) Operable with limited reach and strength. Functions shall be operable with limited reach and strength.

(7) Operable without time-dependent controls. Functions shall not require a sequential response less than three seconds. Alternatively, any response time may be selected or adjusted by the user over a wide range.

(8) Operable without speech. Functions shall not require speech.

(9) Operable with limited cognitive skills. Functions shall minimize the cognitive, memory, language, and learning skills required of the user.

(d) *Output, displays, and control functions.*

(1) Voice telecommunications shall comply with Paragraph 9. (d) (2) (ix) and (x).

(2) All information necessary to operate and use the product, including text, static or dynamic images, icons, or incidental operating cues, shall be provided through at least one mode that complies with the following:

(i) Availability of visual information. Information which is presented visually shall also be available in auditory form.

(ii) Availability of visual information for low vision users. Information which is provided through a visual display shall not require user visual acuity better than 20/70, and shall not rely on audio.

(iii) Access to moving text. Text, other than text output of a TTY, which is presented in a moving fashion shall also be available in a static presentation mode at the option of the user.

(iv) Availability of auditory information. Information which is provided in auditory form shall be available in visual form and, where appropriate, in tactile form.

(v) Availability of auditory information for people who are hard of hearing. Information which is provided in auditory form shall be available in enhanced auditory fashion (*i.e.*, increased amplification, or increased signal-to-noise ratio).

(vi) Prevention of visually-induced seizures. Flashing visual displays and indicators shall not exceed a frequency of 3 Hz.

(vii) Availability of audio cutoff. Products which use audio output modes shall have an industry standard connector for headphones or personal listening devices (*e.g.*, phone-like handset or ear cup) which cuts off speakers when used.

(viii) Non-interference with hearing technologies. Products shall not cause interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) of the user or bystanders.

(ix) Hearing aid coupling. Products providing auditory output by an audio transducer which is normally held up to the ear shall provide a means for effective wireless coupling to hearing aids.

(x) Availability of enhanced audio. Products shall be equipped with volume control that provides an adjustable amplification ranging from 18-25 dB of gain.\*

## **10. Appendix -- Compatibility.**

(a) When accessibility is not readily achievable, telecommunications equipment and CPE shall be compatible with peripheral devices and specialized customer premises equipment commonly used by individuals with disabilities to achieve accessibility and shall comply with the following provisions, as applicable:

(1) External electronic access to all information and control mechanisms. Information needed for the operation of products (including output, alerts, icons, on-line help, and documentation) shall be available in a standard electronic text format on a cross-industry standard port and all input to and control of a product shall allow for real time operation by electronic text input into a cross-industry standard external port and in cross-industry standard format. The cross-industry standard port shall not require manipulation of a connector by the user. Products shall also provide a cross-industry standard connector which may require manipulation.

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\* This provision is inconsistent with the Commission's existing Rules. *See* 47 CFR 68.317 (a).



(2) Connection point for external audio processing devices. Products providing auditory output shall provide the auditory signal at a standard signal level through an industry standard connector.

(3) Non-interference with hearing technologies. Products shall not cause interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) of the user or bystanders.

(4) Compatibility of controls with prosthetics. Touch screen and touch-operated controls shall be operable without requiring body contact or close body proximity.

(5) TTY connectability. Products which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a non-acoustic connection point for TTYs. It shall also be possible for the user to easily turn any microphone on and off to allow the user to intermix speech with TTY use.

(6) TTY signal compatibility. Products providing voice communication functionality shall be able to support use of all cross-manufacturer non-proprietary standard signals used by TTYs.

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Telecommunications Industry Association

Proposal for FCC Guidelines  
for  
Implementing Section 255 of the Communications Act

Explanation and Supporting Rationale

Discussion Draft

December 10, 1997

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Introduction

The purpose of these Guidelines is to provide guidance to manufacturers of telecommunications equipment and customer premises equipment (“CPE”) in discharging their responsibilities under Section 255 of the Communications Act of 1934 and to establish the Commission’s policy with respect to complaints about the accessibility, usability, or compatibility of telecommunications equipment or CPE.

The Telecommunications Act of 1996 (“1996 Act”)<sup>1</sup> added Section 255 to the Communications Act of 1934. Section 255(b) requires manufacturers of telecommunications equipment and CPE to “ensure that the equipment is designed, developed, and fabricated to be accessible to and usable by individuals with disabilities, if readily achievable.” If accessibility is not readily achievable, manufacturers must ensure

that the telecommunications equipment and CPE are compatible with “existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable.”

Section 255(a)(2) states that the term “readily achievable” has the meaning given to it by Section 301(9) of the Americans with Disabilities Act of 1990 (“ADA”), 42 U.S.C. 12181(9). Section 255(e) requires the Architectural and Transportation Barriers Compliance Board (the “Access Board”), in conjunction with the Commission, to develop guidelines for equipment accessibility (“Accessibility Guidelines”) within 18 months of enactment. Section 255(f) vests with the Commission “exclusive jurisdiction” over complaints brought pursuant to Section 255 and provides that there shall be no private right of action to enforce the provisions of Section 255 or any regulations thereunder.

#### 1. General -- Definitions.

The following working definitions are established for the purposes of these Guidelines.

Accessible. As applied in the context of telecommunications, the word “accessible” is used to mean that the telecommunications equipment and CPE can be

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<sup>1</sup> Pub. L. No. 104-104, 110 Stat. 56 (1996).

used by individuals with disabilities in its standard manufactured and shipped form without having to modify the product or purchase other equipment.

This definition reflects the use of the term “accessible to and usable by” in the context of the ADA. For example, with respect to new construction or alterations of an existing facility, “accessible to and usable by” means that patrons and employees of commercial facilities, including individuals with disabilities, “are able to get to, enter, and use the facility.” 56 Fed. Reg. 35544, 35574.

Compatible. Telecommunications equipment and CPE will be considered compatible if they conform with a compatibility interface standard for the interconnection of such equipment with peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities that is adopted by an accredited voluntary consensus standards body. Without defined interface standards to govern the connection of telecommunications equipment and CPE with peripheral devices and specialized CPE, manufacturers of telecommunications equipment and CPE will be unable, as a practical matter, to achieve compatibility with peripheral devices and specialized CPE. Where there is no interface standard governing the connection of telecommunications equipment or CPE with a particular peripheral device or specialized CPE, achieving compatibility between telecommunications equipment and CPE and peripheral devices and specialized CPE frequently may be not readily achievable.

Manufacturer. The term “manufacturer” is defined as the division, business unit, subsidiary, or other business entity that is responsible for introducing directly, or through distribution arrangements, related telecommunications equipment or CPE (often described as product lines) into the United States marketplace in their final form or has direct control over the design, development, fabrication, and costs and expenses associated with such equipment.

This definition of “manufacturer” is most consistent with both the complexity of modern corporate organizations as well as the ADA precedent for determinations of financial responsibility for the readily achievable removal of architectural and communication barriers. Under the ADA, when evaluating whether a specific barrier removal action is “readily achievable,” courts are instructed to consider “whether the local store was threatened with closure by the parent or is faced with job loss. . . .” House Committee on the Judiciary, H. Rep. No. 485, Part 3, 101st Cong., 2d Sess. (1990), at p. 55. The readily achievable barrier removal obligations in the ADA are not intended to result in corporate decisions to close neighborhood stores or eliminate jobs. Congress recognized that, regardless of the financial resources of a corporate entity, decisions related to local operations would inevitably reflect the financial performance of those local operations.

Similarly, the Commission, in assessing the relationship between the financial resources of a corporate entity and decisions related to equipment designs, must bear in mind that decisions to introduce new products or to continue existing ones

inevitably reflect the financial performance of those individual products. For manufacturers, individual products or product lines are “units of decision,” analogous to the local store operations the Congress considered when enacting the ADA. Regardless of the size or financial resources of a corporate parent, individual product management teams, business units, or divisions are provided limited financial resources. In evaluating whether it is readily achievable to make a product accessible or compatible, product teams, business units, or divisions must consider whether, in light of these limited financial resources and the costs of incorporating additional accessibility features, a financially prudent decision would be not to introduce a product. Such an action would be analogous to a decision to close a local retail store that does not meet financial targets because of the added burdens of the ADA, an effect that Congress did not intend the ADA to have. Moreover, because small manufacturers and product teams typically established by larger manufacturers typically have similar -- and limited -- resources, the definition of manufacturer does not establish disproportionate responsibilities based on the size of the manufacturer.

The entity which introduces equipment into the marketplace in its final form should be responsible for assuring compliance with Section 255. In the case of CPE, this generally would be the firm under whose brand name the equipment is marketed. Where a manufacturer designs, develops, and fabricates equipment and introduces it into the marketplace under its own brand name, the responsibility for compliance with Section 255 is clear. In other cases, such as contract manufacturing (where a firm fabricates equipment designed, developed, and marketed by another firm),

private label arrangements (where a firm sets specifications for, and markets under its own name, equipment designed, developed, and fabricated by another firm), or license agreements (where a firm manufactures and markets equipment designed and developed by another firm), holding the firm that introduces the product in its final form into the marketplace responsible for compliance with Section 255 will provide all interested parties with a useful degree of certainty about the entity responsible for compliance with Section 255. Of course, the parties to arrangements such as those described above are free to apportion, by contract among themselves, liability for the consequences of equipment found not to be in compliance with the obligations of Section 255.

The definition of a manufacturer subject to these Guidelines does not differentiate among firms based on their location or national affiliation. Like other technical or operational requirements for telecommunications equipment sold in the United States, these Guidelines will apply to all manufacturers of telecommunications equipment or CPE sold in the United States, regardless of the location or national affiliation of the manufacturer. In accordance with long-standing Commission policy, the definition of a manufacturer does not affect telecommunications equipment or CPE manufactured within the United States for export to other countries. *See, e.g.,* 47 C.F.R. 68.4 (providing an exemption for non-hearing aid compatible telephones manufactured for export).

Disability. The term “disability” means a current limitation affecting hearing, vision, movement, manipulation, speech, or interpretation of information which

substantially limits the use of telecommunications equipment, customer premises equipment, or telecommunications services.

Section 255(a) of the Communications Act of 1934, as amended, incorporates by reference the definition of “disability” from the ADA. The ADA uses a three-pronged definition:

The term “disability” means, with respect to an individual --

- (A) a physical or mental impairment that substantially limits one or more of the major life activities of such individual;
- (B) a record of such an impairment; or
- (C) being regarded as having such an impairment.

42 U.S.C. 12102(2)(A)-(C). Although Section 255 of the Communications Act incorporates the ADA definition of disability, the definition is used in a different way than it is used in the ADA. The ADA uses this definition of disability to identify those individuals who are entitled to the protections of the statute. The second and third prongs of the definition -- a record of an impairment or being regarded as having an impairment - - were included in the ADA to extend its provisions to individuals who, although they do not have an impairment which limits a major life activity, are, nevertheless, potential victims of discrimination on the basis of at one time having had an impairment or being regarded as having an impairment. House Committee on the Judiciary, H. Rep. No. 485, Part 3, 101st Cong., 2d Sess. (1990), at pp. 29-30.



Section 255 of the Communications Act uses the term “disability” to describe the types of impairments that manufacturers must consider when undertaking to make their telecommunications equipment and CPE accessible. In this context, the second and third prongs of the ADA definition of disability are not germane. Unless an individual has an active, current disability that “substantially limits” his or her ability to use telecommunications equipment or CPE, that individual does not need to make use of accessibility features. Inasmuch as the obligations of Section 255 apply to equipment that is marketed generally to all -- those with and without disabilities -- the Guidelines apply only the first prong of the ADA definition and those disabilities Congress intended to be included – the functional limitations of hearing, vision, movement, manipulation, speech, or interpretation of information. See Senate Committee on Commerce, Science, and Transportation, S. Rep. No. 23, 104th Cong., 1st Sess. (1995), p 74; House Committee on the Judiciary, *supra*, at p. 29.

Readily achievable. An action by a manufacturer to make telecommunications equipment or CPE accessible, usable, or compatible is “readily achievable” if it:

- a) is technically feasible at the time design or development activities for the telecommunications equipment or CPE commences;
- b) does not add much to the expense of designing or developing the telecommunications equipment or CPE or to the cost or expense of manufacturing or marketing its telecommunications equipment or CPE;
- c) does not add much to the time required to design or develop its telecommunications equipment or CPE;

- d) does not involve altering a fundamental or essential characteristic of the telecommunications equipment or CPE;
- e) would not significantly limit the usefulness, marketability, or volume of sales of the telecommunications or CPE; and
- f) is not inconsistent with an existing FCC regulation, FCC technical specification or requirement, or stated FCC policy goal and does not conflict with other applicable interface standards.

The obligation of manufacturers to design, develop, and fabricate telecommunications equipment or CPE to be accessible, usable, or compatible is not unlimited. Rather, the legal obligation is expressly limited to that which is readily achievable. Section 255(a) (2) incorporates by reference the term “readily achievable” from the ADA where it is defined as “easily accomplishable and able to be carried out without much difficulty or expense.” The ADA further provides that “in determining whether an action is readily achievable, factors to be considered include --

- (A) the nature and cost of the action needed under this Act;
- (B) the overall financial resources of the facility or facilities involved in the action; the number of persons employed at such facility; the effect on expenses and resources, or the impact otherwise of such action upon the operation of the facility;
- (C) the overall financial resources of the covered entity; the overall size of the business of a covered entity with respect to the number of its employees; the number, type, and location of its facilities; and
- (D) the type of operations of the covered entity, including the composition, structure, and functions of the workforce of such entity; the geographic separateness, administrative or fiscal relationship of the facility or facilities in question to the covered entity.”

42 U.S.C. 12181(9). In view of its origins, it is appropriate to look for guidance about the meaning of the term “readily achievable” in the context in which it is used in the ADA.

There, the term “readily achievable” is used to describe the limits on the obligation of

operators of public accommodations to remove architectural and communications barriers that are structural in nature. Barrier removal is limited to those circumstances where it can be accomplished “easily and without much difficulty or expense.” The term addresses “the degree of ease or difficulty that the business operator would experience in removing a barrier. . . .” House Committee on Energy and Commerce, H. Rep. No. 485, Part 4, 101st Cong., 2d Sess. (1990), at pp. 56-57 (“Commerce Report”). Examples of the types of actions that would be considered readily achievable include “the addition of grab bars, the simple ramping of a few steps, the lowering of telephones, the addition of raised letter and Braille markings on elevator control lights, and similar modest adjustments.” House Committee on Education and Labor, H. Rep. No. 485, Part 2, 101st Cong., 2d Sess. (1990), at p. 110. Congress intended that the ADA require an operator of a public accommodation only to take such modest actions to increase the accessibility of the public accommodation, even if the end result is something short of full accessibility.

The Department of Justice (“DOJ”) regulations implementing the provisions of Title III of the ADA that require the removal of architectural barriers in existing facilities, where readily achievable, provide numerous examples of steps to remove barriers. 28 C.F.R. 36.304(a) and (b). None of these examples are steps which would constitute more than a small fraction of the operating expenses of the public accommodation. The DOJ recommended priorities for operators of public accommodations for barrier removal, clearly recognizing that all barriers may not be removed at once. 28 C.F.R. 36.304(c).

Based on the foregoing, the term readily achievable requires manufacturers to make telecommunications equipment and CPE accessible or compatible only to the extent that modest features that increase the accessibility of the equipment to individuals with disabilities can be implemented. It would be inconsistent with the ADA definition and DOJ interpretations to require manufacturers of telecommunications equipment or CPE to incorporate accessibility features if doing so would add much expense to the cost of designing, developing, or fabricating a product. Examples of accessibility features that generally would be readily achievable include the use of highly contrasting colors for numbers or letters and their background, making buttons as large as practical in view of the size of the equipment, and making wireline handsets that can be used by individuals with hearing aids equipped with telecoils. Other technically feasible features -- voice recognition, for example -- should not be required on simple, low-cost products because the degree of difficulty or expense of providing them currently would exceed the readily achievable threshold.

Similarly, the addition of accessibility features which add much time to manufacturers' product design and development processes for telecommunications equipment and CPE would not be readily achievable. Nor would the addition of accessibility features which are not technically and commercially feasible at the commencement of design and development activities. Because of the competitive environment in the telecommunications industry, telecommunications equipment and CPE products have relatively short lives in the marketplace. For this reason,

manufacturers are under intense pressure to design and develop new products quickly. In such an environment, the addition of some accessibility features, especially those features which require the investment of time and resources to develop new technology, can extend a manufacturer's normal product design and development time and, as a consequence, can cause a manufacturer to miss a window of opportunity in the marketplace, inevitably resulting in a significant loss of sales. Actions with this result are clearly not readily achievable. ADA precedent confirms this conclusion. DOJ clearly has indicated that actions to remove barriers to accessibility are not readily achievable if they materially degrade a public accommodation's operations or revenue. 28. C.F.R. 36.304 (f) (rearrangement of store shelves, display racks, and restaurant tables to be wheelchair accessible "is not readily achievable to the extent that it would result in a significant loss of selling or serving space.")

In applying the definition of readily achievable to a particular piece of telecommunications equipment or CPE, the Commission should not consider the incorporation of multiple accessibility features in isolation one from another. If a manufacturer incorporates features that resolve one identified barrier to accessibility, and the incorporation of features resolving additional barriers would involve efforts that, in total, would exceed the readily achievable standard -- by, for example, adding much expense to the cost of production -- incorporation of the additional accessibility features on that particular piece of equipment would not be required. The DOJ requirements for the ADA are consistent with this approach. In addressing the obligations of operators of public accommodations to remove barriers to accessibility to the extent that it is "readily

achievable,” DOJ determined that, under the ADA, it is “appropriate to consider the cost of other barrier removal actions as one factor in determining whether a measure is readily achievable.” DOJ, Final Rule, 56 Fed. Reg. 35544, at 35554.

Likewise, it is consistent with Section 255 and the ADA to conclude that the readily achievable accessibility of telecommunications equipment and CPE may be achieved without modifying each and every product or model within a product line. Several examples from the ADA context support the proposition that accessibility should be assessed across a product line, rather than on a product-by-product basis. The regulations implementing the ADA do not require hotels to make every hotel room accessible to individuals with disabilities who use wheelchairs. Rather the ADA requires hotels to make some rooms of each type (suites, regular rooms, etc.) accessible “in order to provide persons with disabilities a range of options equivalent to those available to other persons. . . . Factors to be considered include room size, cost, amenities provided, and the number of beds provided.” ADA Guidelines for Buildings and Facilities, 28 C. F. R. Part 36, App. A at 63. Likewise, the ADA Guidelines do not require theaters to make every seat accessible to persons using wheelchairs. Rather, the Guidelines require theaters and other assembly areas to provide wheelchair seating “so as to provide people with physical disabilities a choice of admission prices and lines of sight comparable to those for members of the general public,” including the option to sit beside the companion of one’s choice. *Id.* at 56.

Under the definition of readily achievable, telecommunications equipment and CPE manufacturers are not required to add accessibility features if doing so would alter fundamentally the nature of the equipment. The DOJ regulations implementing the ADA do not require operators of public accommodations to modify their policies, practices, or procedures where “the modification would fundamentally alter the nature of the [public accommodation’s] goods, services, facilities. . . .” 28 C.F.R. 36.302. For example, a manufacturer of a very small communications device intended to meet a market need for such small devices is not required to incorporate accessibility features -- for example, large control buttons or visual display on a wrist-watch sized paging device -- that would require enlarging the size of the device, thereby altering its fundamental characteristic of “smallness.” Similarly, manufacturers should not be required to incorporate accessibility features that would materially limit the mass market appeal -- and hence the volume of sales -- of a product in the general marketplace. Incorporating accessibility features that would so limit the appeal of a product would have the effect of changing a mass market product into an assistive device of limited application -- thus altering a fundamental characteristic of the product.

Finally, a feature or modification to a product is not required if it is inconsistent with an existing FCC regulation, technical specification or requirement, or stated policy goal, or if it conflicts with other applicable interface standards. For example, although it might be feasible to make a product more accessible by modifying the parameters of the product’s transmitter, the modification would not be required if it is inconsistent with the Commission’s rules.

2. Accessibility and compatibility of telecommunications equipment and CPE.

General. Section 255(e) requires the Architectural and Transportation Barriers Compliance Board (“Access Board”), in conjunction with the Commission, to develop accessibility guidelines for the accessibility of telecommunications equipment and CPE. In discharging its portion of this conjoint responsibility, the Access Board convened the Telecommunications Access Advisory Committee (“TAAC”) to assist in developing these accessibility guidelines. Specifically, the TAAC was charged with making recommendations on the following issues: (1) types of equipment to be covered by the guidelines; (2) barriers to the use of such equipment by persons with disabilities; (3) solutions to such barriers, if known, categorized by disability; and (4) the contents of the guidelines. *See* Notice, 61 Fed. Reg. 13813. Following the publication of the TAAC’s report, the Access Board proposed and sought public comment on its proposed Telecommunications Act Accessibility Guidelines. *See* Notice, 62 Fed. Reg. 19178.

By adopting the substantive provisions of this Proposal for FCC Guidelines Implementing Section 255 of the Communications Act, the Commission would discharge its portion of the conjoint responsibility imposed on the Commission and Access Board by Section 255.

Ongoing obligation: The obligation to evaluate the accessibility of telecommunications equipment and CPE is an ongoing obligation that must be



accomplished at the beginning of the design and development process for new equipment and upgrades of existing equipment that materially affect the functionality of the equipment. Early consideration of accessibility in the design and development for telecommunications equipment and CPE will have the effect of enhancing accessibility. Given the speed of technological advances which quickly render existing equipment obsolete, retrofitting equipment already in the marketplace would result in a serious misallocation of resources and would stifle innovation.

Manufacturer's discretion. The solutions to accessibility barriers incorporated by a manufacturer in a given product are not appropriately considered in isolation from the solutions incorporated in its other products. These Guidelines recognize that there will be cases where a manufacturer may not be able to achieve the creation of a single product that addresses accessibility for all, or some, combinations or degrees of disabilities. In fact, products which attempt to address all disabilities, even through selectable modes of operation, may become difficult for everyone to use and can introduce problems for those with cognitive disabilities. Therefore, a manufacturer shall have reasonable discretion in choosing among those accessibility features to be incorporated into telecommunications equipment and CPE. Notwithstanding this discretion, a manufacturer should consider incorporating into another comparable product, an access feature or features not addressed elsewhere. Manufacturers shall make good faith efforts to address the limitations which affect the use of telecommunications equipment and CPE by persons with disabilities.